

**ABSTRACT OF THE DISCLOSURE**

A device for transmitting digital signals between two units mobile relative to each other, in particular via non-contacting rotary joints, comprises a controller on a transmitter side for controlling an issued data rate or data package size of digital signals according to transmission characteristics of a data transmission path so as to achieve an optimum transmission. An optional analyzer means on a receiver side regenerates original signals so that a conversion remains hidden, but a substantially more reliable transmission is achieved.